ALEKSEYEV, Ye.I., kand.

XVI Congress on the International Welding Institute. Svar. proizv. 12:42-43 D '63. (MIRA 18:9)

VORONTSOVA, Ye.I., doktor med. nauk; ALEKSEYEV, Ye.K., inzh.

Conference on labor hygiene and safety in electric welding operations. Svar. proizv. no.5:43-45 My '64. (MIRA 18:11)

ALEKSEYEV, YE K.

5N/5
723.6
.A3

Sideral'nyye udobraniya v bssr; rukovodstvo dlya agronomov, studentov i rabotnikov sel'khozorganov (Green Manuring in Belorussia; Manual for Agriculturists, Students and Agricultural Agencies).. Minsk, gos. izd-vo bssr, 1951.
380 p.
"Spisok ispol'zovannoy literatury po voprosam zelenogo udobreniya": p. 372-381.

ALEKSEYEV, Ye.K., prafesar; LAZARCHYK, K., redaktor; TARNAUSKAYA, tekhnicheskiy redaktor.

[Pulse crops in White Russia] Zernebabovyia kul'tury u BSSR. Minsk, Dziarzh. vyd-va BSSR, 1953. 98 p. (Microfilm) (MLRA 9:5)
(White Russia--Legumes)

ALEKSEYEV, Ye.K., professor.

Are blue lupines needed? Zemledelie 4 no.12:87-94 D '56.
(MLRA 10:2)

(Green manuring) (Lupine)

Alekseyev, Ye. K.

ALEKSEYEV, Ye.K.

[Serradella in White Russia] Syradelia u BSSR. Minsk, Dziarzh. vyd-va BSSR, 1957. 74 p. (MIRA 10:12)
(White Russia--Serradella)

ALEKSEYEV, Ye.K.

ALEKSEYEV, Ye.K.

[Green manuring on irrigated lands] Zelenoe udobrenie na oroshaemykh zemliakh. Moskva, Gos. izd-vo selkhoz lit-ry, 1957. 283 p.
(Green manuring)
(Irrigation farming) (MIRA 11:3)

M

COUNTRY : USSR
CATEGORY : Cultivated Plants. Grains. Leguminous Grains. Tropical Cereals.
ABS. JOUR. : Ref Zhur-Biologiya, No. 1, 1959, No. 1[illegible]

AUTHOR : Alekseyev, Ye.K.
INST. : All-Union Agric. Correspondence Inst.
TITLE : Fertilization of Corn [illegible] Sandy Soils at Moscow suburbs.

ORIG. PUB. : Tr. Vses. s.-kh. in-ta zaochn. obrazovaniya, 1957, vyp. 1, 3-11

ABSTRACT : In order to obtain [illegible] sandy soils, [illegible] the composite [illegible] with manure and mineral fertilizers, is necessary. Introduction of fertilizers [illegible] during sowing time and feeding of the seed [illegible] (N30 P30 K30) raises the [illegible] by 7[illegible]%, pre-sowing completely with mineral fertilizer (N60 P60 K60) raises the crop by [illegible] 22[illegible]%. Introduction of basic fertilizer in the [illegible]

CARD : 1/2

J-4

USSR/Soil Science. Organic Fertilizers.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24778.

Author : Alekseyev, E.K.
Inst :
Title : State and Perspectives of the Application of Green Manure in the USSR.

Orig Pub: Udobreniye i urozhay, 1957, No 3, 1-9..

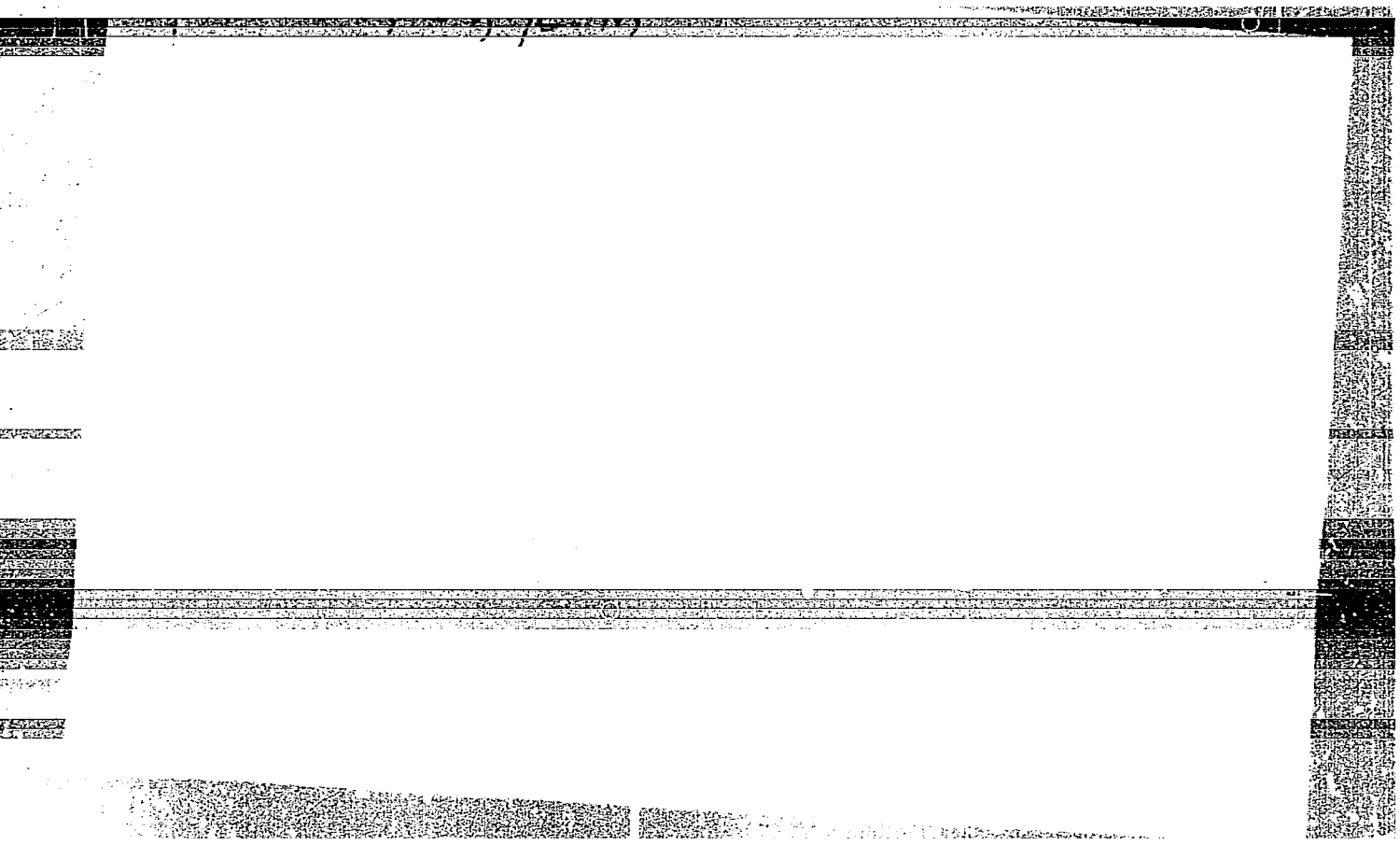
Abstract: Some zones are chosen in which the introduction is advisable of legume crops; peculiarities of their cultivation are shown. 1. Woodlands of Ukraine, Byelorussia to the latitude of Minsk, adjoining regions of the Lithuanian SSSR, of the Bryansk, Kaliningrad and other neighboring districts (yellow fodder, narrow-eared and perennial lupines, seradilla). 2. The zone to the Leningrad-

Card : 1/2

ALEKSEYEV, Ye.K., prof.

More about narrow-leaved lupine. Zemledelie 6 no.3:68-62 Mr '58.
(MIRA 11:4)

(Lupine)



APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000100930006-2"

Alekseyev, Yevgeniy Mikhaylovich

PHASE I BOOK EXPLOITATION 230

Yelyutin, Vyacheslav Petrovich; Pavlov, Yuriy Aleksandrovich; Levin, Boris Yeylevich; Alekseyev, Yevgeniy Mikhaylovich.

Proizvodstvo ferrosplavov; elektrometallurgiya (Production of ferro-alloys; Electrometallurgy) 2d ed., rev. and enl. Moscow, Mashgiz, 1957. 436 p. 7,500 copies printed.

Ed.: Alekseyev, Ye. M.; Ed. of Publishing House: Rozentsveyg, Ya. D.; Tech. Ed.: Vaynshteyn, Ye. B.

PURPOSE: The book is intended as a textbook for students at institutions of higher learning specializing in metallurgy and may also serve as a manual for engineers and scientific workers.

COVERAGE: Theoretical and practical data on production of ferro-alloys are systematized and generalized in this book. The theoretical foundations and technology of producing various ferro-alloys are discussed. Some information on physical chemistry is given in order to facilitate understanding of thermodynamic calculations.

Card 1/7

Production of Ferro-alloys; Electrometallurgy (Cont.) 230

Problems of economics and of safety engineering in the production of ferrous alloys are elucidated. The present edition of this book gives a more detailed description of technology and progress in Soviet and non-Soviet ferro-alloy industries than that given in the first edition. The bibliography contains 93 references, 69 of which are Soviet, 15 in English, 6 in German and 3 miscellaneous.

TABLE OF CONTENTS:

Card 2/7

AUTHOR: Alekseyev, Ye.M. SOV/133-58-7-11/27

TITLE: Perspectives of Utilising Low-grade Manganese Ores for the Production of Ferromanganese and Silicomanganese (Perspektivy ispol'zovaniya nizkosortnykh margantsevykh rud dlya proizvodstva ferromargantsa i silikomargantsa)

PERIODICAL: Stal', 1958, Nr 7, pp 617 - 620 (USSR)

ABSTRACT: Technical and economical advantages of the production of ferromanganese and silicomanganese from carbonate and low-grade manganese ores in electric furnaces is discussed. Carbonate ores from Nikopol'sk and Bol'shoy Tokmak deposits represent nearly-ready ore-flux mixture for the production of ferromanganese of any phosphorus content required in electric furnaces. Low-grade oxide ores with increased phosphorus and silica content unsuitable for smelting in blast furnaces and electric furnaces can be utilised for the production of silicomanganese which, in many cases, can replace ferromanganese and 45% ferro-silicon for the deoxidation of steel. Smelting of ferro-manganese and silicomanganese in electric furnaces from carbonate and low-grade oxide ores is more economical

Card 1/2

Perspectives of Utilising Low-grade Manganese Ores for the Production of Ferromanganese and Silicomanganese

than the production of ferromanganese in blast furnaces from high-grade ores. There are 2 tables.

1. Manganese ores--Processing 2. Manganese alloys--Production
3. Electric frunaces--Applications

Card 2/2

15-1957-12-17068

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, p 53 (USSR)

AUTHOR: Alekseyev, Ye. N.

TITLE: Tectonic Fractures in the Lake Issyk Region of the Alma-Ata Oblast (Tektonicheskiye narusheniya v rayone ozera Issyk Almaatinskoy oblasti)

PERIODICAL: Uch. zap. Almaatin. gos. ped. in-ta, 1955, vol 6, pp 134-137

ABSTRACT: Bibliographical entry

Card 1/1

USSR/Geology

Card 1/1 Pub. 123 - 13/15

Authors : Alekseyev, Ye. N.

Title : Regarding questions concerning the origin of Lake Issyk

Periodical : Vest. AN Kaz. SSR 11/10, 111-115, Oct 1954

Abstract : A geological and geographical description of Lake Issyk (Kaz. SSR) is given in connection with the question concerning its origin. According to the author, it is not Morainic, as was previously thought, but rather Tectonic. Five USSR references (1904-1915). Map.

Institution : .....

Submitted : .....

ALEKSEYEV, YE. N.

USSR/Processes and Equipment for Chemical Industries - Control and Measuring Devices. Automatic Regulation. K-2

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33322

Author : Zelyayev, A.F., Shumov, K.M., Alekseyev, Ye.N.
Inst :
Title : Tensimetric Diaphragm Manometer

Orig Pub : Zavod. laboratoriya, 1956, 22, No 11, 1368-1369

Abstract : In the tensimetric diaphragm manometer developed by the authors the pressure that is being determined distorts a circular steel diaphragm and a wire-resistor primary element fastened thereon. Change in ohmic resistance of the primary element is measured by means of a 4-branch bridge. The manometer consists of a cylindrical housing into which is threaded a cover with an aperture which provides an outlet to the atmosphere. The diaphragm with the primary element fastened thereto is clamped between housing and cover. On a plate that is located on the cover is fastened a

Card 1/2

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 33322

primary element which compensates the temperature distortion of the primary element of the diaphragm. Pressure from the system under study is admitted into a bottom chamber through a connection tube. The apparatus is suitable for measuring static and dynamic pressure and vacuum. With a relative distortion of the diaphragm not exceeding 0.2-025% the apparatus has a rectilinear response. In the experimental studies diaphragms 50 mm in diameter were used. Use of a diaphragm of larger diameter is disadvantageous since on increase of the diameter the frequency of the natural oscillations of diaphragms decreases. Diaphragms having a thickness from 0.1 to 7 mm were used to measure pressures from 0.004 to 900 kg/cm^2, respectively.

FURSOV, Sergey Petrovich; ALEKSEYEV, Ye.N., red.; VORONTSOVA, Z.Z., tekhn. red.

[Storage battery charging devices with semiconductor rectifiers] Poluprovodnikovye vypriamiteli dlia zariadki akkumuliatorov. Izhevsk, Udmurtskoe knizhnoe izd-vo, 1959. 47 p. (MIRA 15:8)
(Storage batteries) (Electric current rectifiers)
(Electric power supply to apparatus)

ALEKSEYEV, Ye.P.

Reduce the number of crossings on new railways. Transp. stroi. 14 no.5:6-8 My '64. (MIRA 18:11)

1. Glavnyy inzh. proyekta linii Abakan - Tayshet.

ALEKSEYEV, Ye.P., ; PAUL', V.P.

New Abakan-Taishet railroad line. Transp.stroi. 9 no.3:8-13 Mr.'59. (MIRA 12:4)

1. Glavnyy inzhener proyekta novoy zheleznodorozhnoy linii Abakan-Tayshet (for Alekseyev). 2. Rukovoditel' sektora organizatsii stroitel'stva TSentral'nogo nauchno-issledovatel'skogo instituta svyazi (for Paul').
(Siberia--Railroads--Construction)

KOROTCHAYEV, D.I.; ALEKSEYEV, Ye.P., inzh.

Rock fill construction for the Novokuznetsk-Abakan and Abakan Tayshet lines. Transp. stroi. 14 no.9:7-10 S '64 (MIRA 18:1)

1. Nachal'nik upravleniya Abakanstroyput' (for Korotchayev).

ALEKSEYEV, Ye.P., inzh.

Excavating by large-scale blasting. Transp. stroi. 15 no.4:
4-6 Ap '65. (MIRA 18:6)

ALEKSEYEV, Ye. S.

AUTHORS: Abdeyev, K.M., Alekseyev, Ye. S. et alii. 136-9-14/14

TITLE: Fedor Gerasimovich Gurov (1908-1957) (Obituary).

PERIODICAL: Tsvetnyye Metally, 1957, No.9, pp.85-86 (USSR).

ABSTRACT: After graduating in 1935 at the Leningrad Mining Institute Gurov worked for a number of years in various industrial undertakings and in 1951 became the chief mechanical engineer of the Ministry of Non-Ferrous Metallurgy. In 1954 he was nominated as the director of the Chief Directorate of the Engineering Works of the Non-Ferrous Metallurgy Industry and in April, 1957 he became the head of the special design office of the rare metal industry of the Giredmet Institute. Due to his initiative, the Engineering Works of the Non-Ferrous Metallurgy Industry have mastered the production of improved equipment for mining non-ferrous metals and for the metallurgical undertakings of the Non-Ferrous Metallurgy Industry. He was a member of the editorial board of "Tsvetnyye Metally".
There is one photograph.

AVAILABLE: Library of Congress.

Card 1/1 1. Obituary

USCOMM-DC-54799

ALEKSEYEV, Ye.S.

S/126/60/010/01/016/019
E032/E514

AUTHORS: Ryabinin, Yu.N., Rodionov, K.P. and Alekseyev, Ye.S.

TITLE: An Estimate of Certain Physical Characteristics of Strongly Compressed Metals

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No.1, pp. 150-152

TEXT: Since a quantum mechanical theory of solids subjected to high pressure has not yet been developed, physical characteristics of such solids must be estimated with the aid of the classical models put forward by Debye (Ref.1), Grüneisen (Ref.2) and Lindemann (Ref.3). It is well known that the characteristic frequency ν of oscillations in a crystal lattice and hence the Debye temperature also, increases with pressure. For an isotropic body the Debye temperature is given by

$$\theta_D = \frac{hc}{R}\left(\frac{3N}{4\pi V}\right)^{1/3} \quad (1)$$

where c is the mean velocity of propagation of elastic vibrations in an isotropic body. This velocity in turn depends

Card 1/3

S/126/60/010/01/016/019
E032/E514

An Estimate of Certain Physical Characteristics of Strongly Compressed Metals

on the elastic moduli so that if the latter are known as functions of pressure, then the Debye temperature given by Eq.(1) can be estimated. Other physical characteristics such as specific heat, melting point, thermal expansion coefficient etc. can then be expressed in terms of the Debye temperature. This approach is used in the present paper to calculate the Debye temperature as a function of pressure for aluminium, silver, copper and iron and the melting point as a function of pressure for iron and aluminium. The results obtained are shown in Figs. 1 and 2. In Fig.2 the continuous line represents the experimental results obtained by Strong (Ref.11) and Butuzov (Ref.12) and the dotted line shows the theoretical results obtained by the present authors. The agreement is good and hence it is concluded that the classical models employed lead to correct estimates for the parameters of a solid body as functions of pressure. Acknowledgments are made to R.G.Arkhipov for discussions and advice. There are 2 figures and 12 references, 2 of which are Soviet, 3 German and 7 English.

Card 2/3

S/181/62/004/005/001/055
B102/B104

AUTHORS: ~~Alekseyev, Ye. G.,~~ and Arkhipov, R. G.

TITLE: Electron transitions in cesium and rubidium under pressure

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1077 - 1081

TEXT: Electron transitions in Cs and Rb at pressures of some ten thousand atmospheres were calculated. At these pressures the metal density is almost doubled, which means that the atomic shells are strongly deformed. The statistical model is well suited for the description of multi-electron atoms in this case. The wave functions of the valence electrons can be represented in the semi-classical approximation. The special case of 5d and 6s shells was treated; the statistical Thomas - Fermi potential of the Wigner - Seitz problem was used to determine E(x) ($x = Z^{1/3}me^2r/0.885h^2$). The lower levels for Cs were found to overlap when x = 19 (or r = 4.43 atomic units) corresponding to $\rho = 4.1$ g/cm^3. This result agrees with that of Sternheimer (Phys. Rev. 78, 235, 1950) and with the experiments of Bridgman. The 4d shell for Rb can be calculated only for $x < 10$ as for

Card 1/2

S/181/62/004/012/049/052
B125/B102

AUTHOR: Alekseyev, Ye. S.

TITLE: Estimation of the electron transition under pressure in barium

PERIODICAL: Fizika tverdogo tela, v. 4, no. 12, 1962, 3675-3676

TEXT: The electron transition that is possible under pressure in barium when the shells of the 5d and 6s electrons overlap has been calculated neglecting the interaction of the outer shell electrons. The same method was used for alkali metals. This rough calculation confirms to some extent the electron character of various transitions occurring under pressure. The intersection of the energy levels for the 6s and 7d electrons corresponds to a radius of 18.3 Thomas-Fermi units (this is equivalent to 2.23 Å) of the equivalent Wigner-Seitz sphere (having the same volume as the corresponding polyhedron of the crystal lattice atom). The 10% change of radius or 30% change of volume established, with the P. Bridgman's values for compressibility of Na, point to a pressure of 50,000 to 60,000 atmospheres. This value corresponds fairly well with the

Card 1/2

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.11, 1964, 1913-1932

TOPIC TAGS: solid state physics, high pressure, elastic property, thermodynamic

lems of the volume-elastic behavior of solids. Thermodynamic properties are first considered, and the behavior under pressure of the entropy, energy, free energy, Debye temperature, heat capacity, and melting point is discussed. In the discussion of the Debye temperature and quantities depending on it, it is assumed that Poisson's ratio is independent of pressure. Following this, a number of equations of state are discussed. It is pointed out that at accessible pressures the energy of compression may exceed the heat of sublimation and become comparable with the fusi-

1/3

ACCESSION NR: AP4049031

zation energy. The compressibilities and atomic volumes of the elements are plotted against atomic number at several pressures up to 5 x 10^5 kg/cm^2. The data were obtained partly from direct experiment and partly by extrapolation with the aid of an equation of state. As the pressure increases, the periodic variations of the

in the third and final section, together with the influence of pressure on the electron band structure. As the lattice ions approach each other under the influence of pressure, the electron bands widen and eventually overlap. This leads to changes in chemical properties. The authors, however, do not consider it entirely accurate to speak of an essentially new chemistry of high pressure, as did T.Hall (J.Wash.Acad.Sci.47,8,300,1957). Finally, at very high pressures not yet attainable in the laboratory, all the energy bands are expected to cross completely. The atoms will then no longer have their individual electron shells and the material will be in a state that the authors characterize as that of a solid cold plasma. Orig.art.has: 58 formulas, 8 figures and 1 table.

2/3

ACCESSION NR: AP4049031

ASSOCIATION: none

SUBMITTED: 21Jan64 ENCL: 00

SUB CODE: SS NR REF SOV: 020 OTHER: 035

3/3

ALEKSEYEV, Ye.S.; ZASYPKIN, N.S.; SHTOKAREV, A.D.; BUROVOY, I.A.; KRICHEVSKIY, G.Ya.; BOROVKOV, Ye.G.; KUZNETSOV, Yu.A.

Utilization of the excess heat of the fluidized bed of roasting furnaces. Prom. energ. 20 no.5:43-47 My '65. (MIRA 18:7)

ALEKSEYEV, Ye.T.

ALEKSEYEV, Ye.T.; TERYUSHNOV, A.V.

Business accounting in textile enterprises and efforts to make them profitable. Tekst.prom.8 no.2:25-26 F '48. (MLRA 8:11)
(Textile industry--Accounting)

ALEKSEYEV, Ye.T.; TROITSKIY, N.N., red.; PINKHASOV, Ya.B., tekhn.red.

[Tashkent Textile Combine is the creation of the Stalin five-year plans] Tashkentskii tekstil'nyi kombinat detishche stalinskikh piatiletok. Tashkent, Gos. izd-vo UzSSR, 1950. 60 p. (MIRA 11:5)
(Tashkent--Textile industry)

ALEKSEYEV, Ye. T.

"Reserves of Labor and Equipment Productivity," (co-author), Tekstil. Prom., No 8, pp. 10-12, 21 May 53

ALEKSEYEV, Ye. T.

ALEKSEYEV, Ye.T.

The Economic Council in action. Tekst.prom. 17 no.9:7-10 S '57.
(MIRA 10:11)

1. Predsedatel' Soveta narodnogo khozyaystva Ivanovskogo ekonomicheskogo rayona.
(Russia--Industries) (Textile industry)

ALEKSEYEV, Ye.T.

Systematic over-all modernization of equipment, mechanization and automatization of industrial processes are decisive factors in carrying out tasks in 1959-1965. Izv.vys.ucheb.zav.;tekh. tekst.prom. no.2:3-8 '59. (MIRA 12:6)

1. Predsedatel' Soveta narodnogo khozyaystva Ivanovskogo administrativnogo rayona.
(Textile industry--Equipment and supplies)

ALEKSEYEV, Ye.T.

Fighting for the introduction of progressive technology.
Tekst. prom. 19 no.11:1-3 N '59. (MIRA 13:2)

1.Predsedatel' Ivanovskogo sovnarkhoza.
(Ivanovo Economic Region--Textile industry)

ALEKSEYEV, Ye.T.; KHOLOSTOV, F.Ya.; MIKHAYLOV, L.I.; AVGUSTAYTIS, L.M.

Practices in mechanization and automatization in the textile industry. Tekst.prom. 21 no.2:17-34 Ja '61. (MIRA 14:3)

1. Predsedatel' Ivanovskogo sovnarkhoza (for Alekseyev). 2. Zam. predsedatelya Mosoblsovnarkhoza (for Kholostov). 3. Zam.predsedatelya Leningradskogo sovnarkhoza (for Mikhaylov). 4. Zam.nachal'nika Upravleniya legkoy promyshlennosti sovnarkhoza Latviyskoy SSR (for Avgustaytis).

(Textile industry) (Automatic control)

ALEKSEYEV, Ye.T.

New cotton and staple fabrics. Tekst.prom. 21 no.7:5-7 Jl '61.
(MIRA 14:8)

1. Predsedatel' Ivanovskogo sovnarkhoza.
(Ivanovo Province—Textile fabrics)

DELAMURE, S.L.; ALEKSEYEV, Ye.V.

A case of albinism in the Black Sea dolphin Delphinus delphis ponticus Barabasch, 1936. Biul.MOIP.Otd.biol. 67 no.4:141-143 Jl-Ag '62. (MIRA 15:10)

(ALBINOS AND ALBINISM) (BLACK SEA--DOLPHINS)

ALEKSEYEV, Ye.Ye.

Depot serviced by "The great initiative" group is an enterprise of communist labor. Zhel.dor.transp. 43 no.3:59-64 Mr '61. (MIRA 14:3)

1. Nachal'nik ordena Trudovogo Krasnogo Znameni lokomotivnogo depo Moskva-Sortirovochnaya Moskovskoy dorogi.
(Moscow--Railroads--Employees) (Railroads--Labor productivity)

ALEKSEYEV, Ye.Ye.

Visiting Rumanian railroad workers. Elek.i tepl.tiaga 6 no.5:44-45 My '62. (MIRA 15:6)

1. Nachal'nik depo Moskva-Sortirovochnaya-Ryazanskaya.
(Rumania--Relations (General) with Russia)
(Russia--Relations (General) with Rumania)
(Rumania--Railroads)

LEONOVICH, B.N.; ALEKSEYEV, Ye.Ye.; IVANOV, A.I.; KOTSYUBNYAK, A.V.; KACHALKIN, A.P.; TUZHILKIN, A.P.; KUDRYAVSKIY, R.T., mashinist; SHAPIRO, M.M.

Brief resumé of the speeches made at the conference of the representatives of the collectives and shock workers of communist labor engaged in the operation and maintenance of locomotives. Elek. i tepl. tiaga 7 no.9:1-7 S '63. (MIRA 16:10)

1. Nachal'nik depo Grebenka Yuzhnoy dorogi (for Leonovich). 2. Nachal'nik depo kommunisticheskogo truda Moskva-Sortirovochnaya (for Alekseyev). 3. Nachal'nik depo kommunisticheskogo truda Liski Yugo-Vostochnoy dorogi (for Ivanov). 4. Obshchestvennyy mashinist-instruktor, sekretar' partiynogo byuro depo Mukachevo L'vovskoy dorogi (for Kotsyubnyak). 5. Zaveduyushchiy otdelom zarabotnoy platy i proizvodstvenno-massovoy raboty TSentral'nogo komiteta professional'nogo soyuza rabochikh zheleznodorozhnogo transporta (for Kachalkin). 6. Master tsekha kommunisticheskogo truda po remontu toplivnoy apparatury depo Rtishchevo Privolzhskoy dorogi (for Tuzhilkin). 7. Depo Irkutsk-Sortirovochnyy Vostochno-Sibirskoy dorogi (for Kudryavskiy). 8. Starshiy master depo Tashkent Sredneaziatskoy dorogi (for Shapiro).

ACC NR: AP7005574 (A) SOURCE CODE: UR/0145/66/000/011/0120/0124

AUTHOR: Zemlyanskiy, V. A. (Docent); Alekseyev, Yu. (Professor; Doctor of technical sciences)

ORG: none

TITLE: The calculated basis of the wear resistance of round rotating cutting tools

SOURCE: IVUZ. Mashinostroyeniye, no. 11, 1966, 120-124

TOPIC TAGS: wear resistance, cutting tool, rotating cutting tool, metal cutting, physical parameter

ABSTRACT: A theoretical evaluation is given of the reasons for extending the period of wear resistance of the cutting tool by replacing the standard cutting tool with a rigidly fixed cutting edge by a round rotating cutting tool. The effect appears to be due to the shortening of the path of a point on the rotating cutting edge in material being machined and to decreasing the wear of its faces through a favorable change in the physical parameters in the cutting zone. The paper was presented by Professor Alekseyev, Yu., Doctor of technical sciences, Khar'kov Aviation Institute, 02 Nov 65. Orig. art. has: 2 figures and 12 formulas. [Translation of authors' abstract]

SUB CODE: 13/SUBM DATE: 02Nov65/ORIG REF: 013/ UDC: 621.90.025 [NT]

Card 1/1

ANISIMOV, A.F.; SAMARSKIY, A.G.; ALEKSEYEV, Yu.A.

Automatic control of the catalyst circulation system in a catalyst cracking unit. Khim.i tekh.topl. i masel 5 no.6:1-6 Je '60. (MIRA 13:7)

1. Spetsial'noye konstruktorskoye byuro po avtomatike v neftepererabotke i proizvodstve iskusstvennogo zhidkogo topliva.
(Cracking process) (Catalysis) (Automatic control)

SUSANOV, Ya.Ya.; ALEKSEYEV, Yu.A.

Principles of the automatic control of the separation of homogeneous liquid and gas mixtures. Trudy KF VNII no.8: 60-79 '62.

Results of the combined automatic control of the AGFU-1 unit of the Novo-Ufimskiy Petroleum Refinery. Ibid.:80-87 (MIRA 17:5)

ALEKSEYEV, Yu. A.

"Kinetic calculation of separation processes from the analysis of parameter change along the height of an apparatus."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Krasnodar' Branch, All-Union Petroleum Res Inst.

ALEKSEYEV, Yuriy Aleksandrovich; SOKOV, Georgiy Aleksandrovich; MALYSHEV, V., red.

[Parasites] Darmoedy. Moskva, Politizdat, 1964. 77 p. (MIRA 17:12)

ALEKSEYEV, Yu. F., Cand. Tech. Sci. (diss) "Investigation of Influence of Mechanical Properties of Mining Rocks on Effectiveness of their Decomposition during Drilling with Cutting Chisels at Sites in Bashkiria," Moscow, 1961, 14 pp (Groznyy Petrol. Inst., Ufa Petrol. Sci. Res. Inst.) 200 copies (KL Supp 12-61, 262).

FEDOROV, V.S.; BULATOV, V.V.; ALEKSEYEV, Yu.F.

Comparative data on specific operations in the disintegration of rocks under field and laboratory conditions. Neft. khoz. 41 no. 11:11-14 N '63. (MIRA 17:7)

ALEKSEYEV, Yu.G.; MEDVEDEV, V.I.

New method of lining carbon disulfide furnaces. Khim.volok. no.3:69 '59. (MIRA 12:11)

1. Krasnoyarskiy zavod.
(Carbon disulfide) (Furnaces)

ALEKSEYEV, Yu.G., inzh.

Details of planning the reorganization of distribution points.
Transp.stroi. 10 no.1:47-48 Ja '60. (MIRA 13:6)
(Railroads--Switching)

ALEKSEYEV, Yu.G.

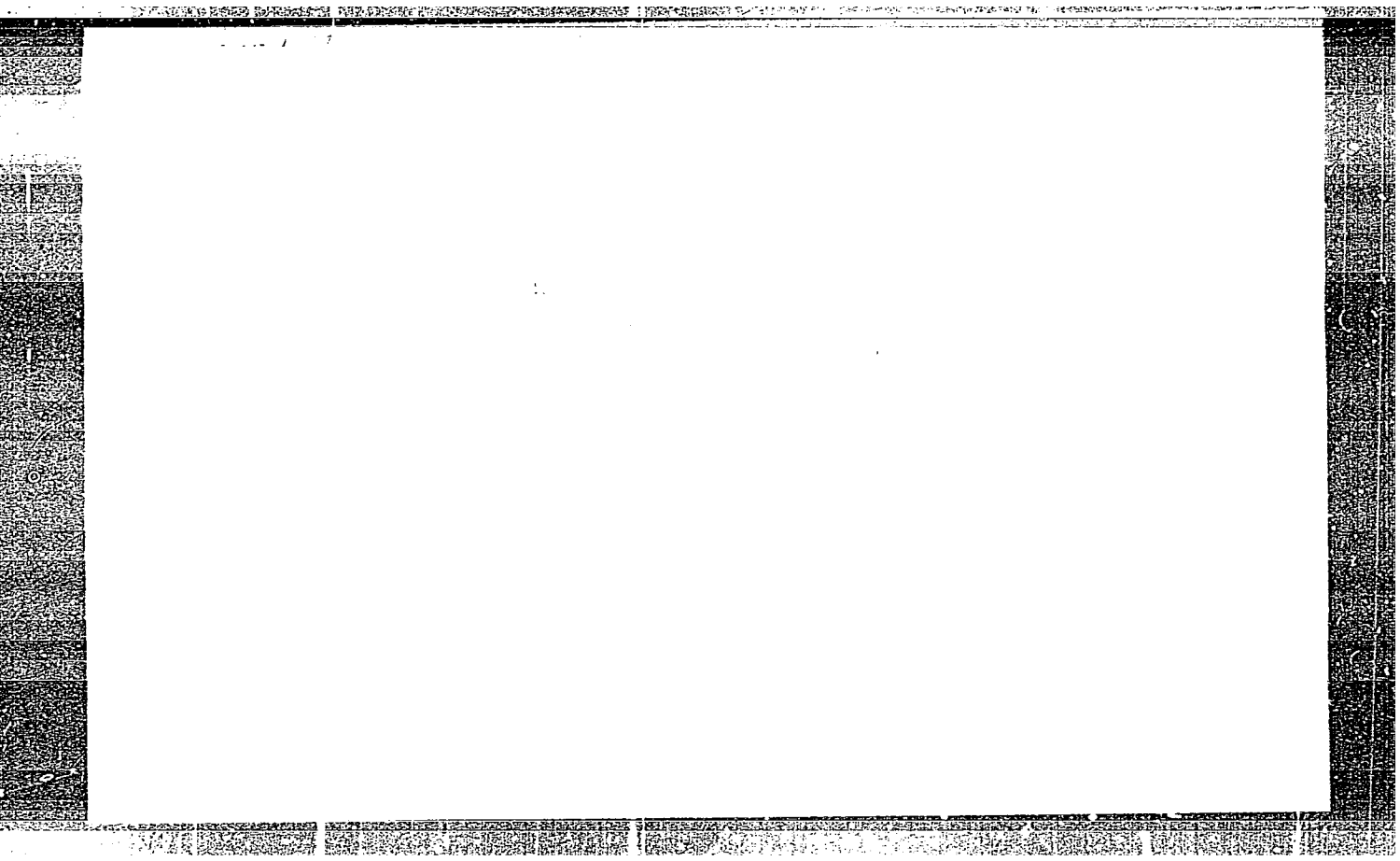
Efficient use of water in the carbon disulfide production. Khim. volok. no.4:41 '60. (MIRA 13:10)

1. Krasnoyarskiy zavod.
(Krasnoyarsk—Carbon disulfide) (Water)

ALEKSEYEV, Yu. I.

Chem Strontium metaniobate and its hydrates. B. I. Krylov and Yu. I. Alekseev. *J. Gen. Chem. U.S.S.R.* 24, 1857-8 (1954)(Engl. translation).—See *C.A.* 49, 6758d. 2

—R. M. P.



ALEKSEYEV, Yu. I.

Metaniobates of calcium and barium and their hydrates. B. F. Krylov and Yu. I. Alekseev. *Zhur. Obshchei Khim.* 25, 1052-7(1955); *cf. C.A.* 49, 6758c.—When $KNbO_3$ in aq. KOH soln. was mixed with equiv. amts. of $Ca(OH)_2$ (0.092 g./ml. Ca^{++}) and $Ba(OH)_2$ (0.026 g./ml. Ba^{++}) solns., the white cryst. $Ca(NbO_3)_2.2H_2O$ and $Ba(NbO_3)_2.3H_2O$ ppted. Their solys., in g./l. at 15°, and soly. product (both detd. via Nb), were, resp., 0.00525, 1.26×10^{-6}; 0.00459, 3.65×10^{-6}. Under a steady temp. rise these (com)pd. at 130–297° and 120–228°, resp., to give the monohydrates, which were stable up to the ranges 348–483° and 254–320°, resp., at which the finely powd. anhyd. salts were formed; the heating required 120 min. M.ps. and ds. were: $Ca(NbO_3)_2$, 1310°, 3.770; $Ba(NbO_3)_2$, 1285°, 4.046. X-ray data (Fe emission) on lattice parameters and interplanar distances are given for the anhyd. salts, and for the higher hydrates; the former are thought to have a face-centered cubical lattice of the fluorspar type, like that of $Sr(NbO_3)_2$ as illustrated, while the latter have a similar structure except for the H_2O in its spaces. Calcns. of d. from x-ray data agreed with the exptl. d. Also in *J. Gen. Chem. U.S.S.R.* 25, 1013-16(1955) (Engl. translation). Malcolm Anderson

Ural'skiy politekhnicheskiy institut imeni S. M. Kirova.

ALEKSEYEV, YU. I.

USSR/Inorganic Chemistry - Complex Compounds, C

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 653

Author: Alekseyev, Yu. I., and Krylov, Ye. I.

Institution: None

Title: Hydrides of the Transition Elements. 1. Synthesis and Properties of Niobium Hydrides

Original Periodical: Ukr. khim. zh., 1956, Vol 22, No 2, 143-145

Abstract: $NbCl_5$ reacts very rapidly with a 0.3 M C_6H_5MgBr in ether, forming, in the opinion of the authors, a cinnamon-colored residue of Nb. The highly dispersed Nb thus produced can combine easily with hydrogen, and the hydride separates out in the form of a sticky, dark, cinnamon-colored liquid. Upon washing with ether and drying at room temperature in a stream of H_2, this liquid changes to a black amorphous Nb hydride (I). After treatment with C_6H_5Br, I again turns liquid. I is oxidized in air with the formation of niobic acid. Concentrated HNO_3 oxidizes I to niobic acid and NO_2. The action of HCl on I results in

Card 1/2

Card 2/2

ALEKSEYEV, Yuriy Fedorovich; NADEZHKIN, Aleksandr Danilovich; KAYESHKOVA, S.M., ved. red.; VORONOVA, V.V., tekhn. red.

[Means for increasing core recovery; practices of Bashkirian petroleum workers] Puti uvelicheniia vynosa kerna (opyt neftianikov Bashkirii). Moskva, Gostoptekhizdat, 1963. 67 p. (MIRA 16:10)

(Bashkiria--Core drilling)

Category : USSR/Radiophysics - Application of radiophysical methods I-12

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1977

Author : Alekseyev, Yu.I.
Title : Setup with Modulation-Interference Reception of Radio Waves from Cosmic Sources.

Orig Pub : Tr. 5-go soveshchaniya po vopr. kosmogonii, 1955, M., AN SSSR, 1956, 123-126

Abstract : The Reyl modulation radio-interferometer was built for a 3.5 m wavelength. Periodic variation of one of the arms of the interferometer by half the wavelength is carried out with the aid of a high-speed polarized relay, which alternately shorts the ends of two specially-connected quarter-wave sections of coaxial cable.

Card : 1/1

88930

S/035/61/000/001/006/019
A001/A001

3,1720 (1041, 1126, 1127)

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1961, No. 1, pp. 45 - 46, # 1A342

AUTHOR: Alekseyev, Yu.I.

TITLE: Some Data on Sun's Radio Emission at the 1.5-m Wavelength

PERIODICAL: "Solnechnyye dannyye", 1959/1960, No. 10, pp. 72 - 74

TEXT: The author describes observations carried out at a frequency of 207 Mc at the Crimean Station of the Physics Institute of AS USSR according to the IGY program. Measurements were made by means of an installation with the $11^{\circ}x14^{\circ}$ diagram and a receiver with a noise factor of 6 and a passband of 150 kc. The method of marine interferometer was employed for detecting local sources on the Sun. An intensified radio emission was observed during 30% of all the days, in 95% the intensified radio emission was polarized (partially or fully). In 96% of cases intensified radio emission was accompanied by bursts polarized in the same way as intensified radio emission. There were cases when polarization of bursts differed

Card 1/2

Card 2/2

S/109/61/006/005/006/027
D201/D303

9,9100

AUTHORS: Kokurin, Yu.L., Sukhanovskiy, A.N., and Alekseyev, Yu. I.

TITLE: Investigating of models of large-scale inhomogeneities in the ionosphere using the radioastronomical method

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 5, 1961, 738 - 746

TEXT: It has already been shown by V.V. Vitkevich, and Yu.L. Kokurin (Ref. 1: Radiotekhnika i elektronika 1957, 2, 7, 826) that the oscillations of the refraction of radiowaves propagated through the whole thickness of the ionosphere are conditioned by the presence in the ionosphere of inhomogeneities with horizontal dimensions of the order of hundreds of kilometers. Again Yu.L. Kokurin (Ref. 2: Radiotekhnika i elektronika 1959, 4, 12, 1985) approximated the evaluation of the dependence of the mean amplitude of oscillations of refraction $\overline{(R_n)_{max}}$ on the vertex angle z, and it was

Card 1/6

shown that this dependence is essentially different for the two models of the layer. In the present article, the authors give the results of measuring the irregular refraction of the ionosphere for two angles simultaneously $z \simeq 0 - 30^0$ and $z \simeq 85^0$. The source of radiation were the sun spots, measurements were made using a vertical naval interferometer in the manner described in Ref. 1 (Op.cit.) The interferometer data were as follows: working frequency f = 207 Mc/s (λ = 1.45 m); antenna height over the sea level H = 286.3 m. The results are illustrated of recording the sunrise on December 29, 1958. Further detailed observations were made only during the sunsets, from which basic parameters of large ionosphere inhomogeneities were determined by measuring the periods and amplitudes of refraction oscillations. For each wave (period) of oscillations straight lines, tangential to $R^V_n(z)$ at two points were determined at the beginning and end of the ^{n}period as shown in Fig. 4. The distance between the two points was assumed to be equal to the period of oscillations or to the angular dimension of the inhomogeneity ΔZ, and half of the distance of the curve R^V as referred to the

Investigating of models ...

tangent was taken as the amplitude of the oscillation of refraction $(R_n^v)_{max}$. Angular dimensions were then transposed into the linear dimension d under the assumption that the distribution of the inhomogeneity was at a height h_0 = 300 km (Ref. 1: Op.cit.). The value of d oscillation between 100 - 500 km with its most probable value $\overline{d} \simeq$ 200 - 220 km. The amplitudes of oscillations of refraction $(R_n^v)_{max}$, averaged over every session of observation, lie basically within the limits 0.5 - 5.0' with the most probable value $\overline{(R_n^v)_{max}}$ = 2.5 - 3.0'. From the above data the parameters of the two models of inhomogeneities were evaluated as follows: Model 1. Assuming the linear dimensions $\overline{d} \simeq$ 200 km its effective thickness $\mathcal{L}$ = 50 km and the refractive index n = 0.9983 ($N = 1.8 \cdot 10^6$ cm^{-3}) the difference between the geometrical and optical thickness of the inhomogeneity is L ≃ 80 m. From Equation (6) obtained by Yu.L. Kokurin (Ref. 2: Radiotekhnika i elektronika, 1959, 4, 12, 1985) the variations of

Card 3/7 6

Investigating of models ...

this difference

$$L = \overline{(R_n^V)_{max}}\, d \frac{\sqrt{\left(1 - \frac{r_0}{r_0 + h_0}\sin z\right)^2}}{2\pi} = 2{,}7 - 3{,}5 \text{ km} \qquad (1)$$

(radius of earth - r_0) from which $\frac{\Delta L}{L}$ = 3.3 - 4.4 %; thus if the irregularities in the refraction are due to the presence in the F layer of horizontal gradients, the horizontal changes (with an average period ~200 km) of the optical thickness of large inhomogeneities and of the total number of electrons in them are 3.3 - 4.4 %.

Model 2. For the same parameters of inhomogeneities for the wave model the following is obtained using Equation (10) from Yu.L. Kokurin (Ref. 2: Op.cit.).

$$\overline{\Delta h} = \frac{\overline{(R_n^V)_{max}}\, d^2 \left[1 - \left(\frac{r_0}{r_0 + h_0}\sin z\right)^2\right]^{1/2}}{L(2\pi)^2 \frac{r_0}{r_0 + h_0}\sin z} = 0{,}45 - 0{,}54 \text{ km} \qquad (2)$$

Card 4/7 6

S/109/61/006/005/006/027
D201/D303

Investigating of models ...

It follows that the observed oscillations in the refraction may be attributed to the wave structure of the ionosphere inhomogeneities with a period $\bar{d}$ = 200 km and amplitude of the wave $\Delta h \simeq 0.5$ km. The observations of the irregular refraction near the vertex were carried out in the Crimea (44°N) using a horizontal interferometer consisting of two parabolic antennas spaced in an East-West direction by about D = 520 m; the effective beam width was about 15°. In order to determine the curves of the dependence of the irregular refraction R_n on time, the position of the antenna lobes were determined in time units with the origin as the instant of culmination of the source. Observations were made between December 12, 1958 and June 1, 1959 with four cosmic sources. Graphs are given for every session of observations for $R_n = f(t)$. The authors conclude that large-scale ionosphere inhomogeneities represent wave type formations (Model II) with an average horizontal scale (period) $\bar{d} \simeq 200$ km and the amplitude of the wave $\Delta h \geqslant 0.5$ km. Only an insignificant thickness of the layer seems to have a wave structure. This thickness is $\leqslant 20\%$ of its total effective value. It would

Card 5/[illegible]

Investigating of models ...

appear as if this part of the inhomogeneity were distributed near the region of maximum electron concentration and has the geometrical thickness $\leq$50 km. There are 5 figures, 1 table and 14 references: 10 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: H. Hewish, Proc. Roy. Soc., 1952, 214A, 404; J.P. Wild, J.A. Roberts, J.Atmos and Terr. Physc. 1956, 8, 55; G.N. Munro, Proc. Roy. Soc., 1950, 202, 208; E.N. Bramley, Proc. Roy. Soc., 1953, 220, 39.

ASSOCIATION: Fizicheskiy institut im. P.N. Lebedeva AN SSSR (Institute of Physics im. P.N. Lebedev AS SSSR)

SUBMITTED: June 4, 1960

Card 6/6

39538
S/033/62/039/004/004/008
E032/E514

3.1720

AUTHORS: Alekseyev, Yu.I., Babiy, V.I., Vitkevich, V.V., Gorelova, M.V. and Sukhovey, A.G.

TITLE: Observations of solar radio-emission in the metre range during the total solar eclipse of February 15, 1961

PERIODICAL: Astronomicheskiy zhurnal, v.39, no.4, 1962, 643-652

TEXT: The observations were carried out at the Krymskaya nauchnaya stantsiya laboratorii radioastronomii FIAN (Crimean Scientific Station of the Radioastronomical Laboratory of FIAN) using the multichannel radiospectrograph described earlier (V.V.Vitkevich, Z.I.Kameneva, D.V.Kovalevskiy, Radiotekhnika i elektronika, 1, No.6, 864, 1956; V.V.Vitkevich, Tr.5 soveshchaniya po voprosam kosmogonii 9-12 marta 1955 g., Radioastronomiya, Izd-vo AN SSSR, 1956, p.14). Various improvements have recently been introduced into this spectrograph and its wavelength range extended. The working range is 40-150 Mc/sec. There are sixteen channels and the sensitivity in each channel is 10^{-22} W/m^2 cps. Detailed results are now reproduced in the form

Card 1/2

of graphs for the 1.5-4 m range. Analysis of the results is used to determine the radio diameter of the sun which is found to be:

$$D_p = 0.035\lambda^2 - 0.035\lambda + 1.28,$$

where λ is in metres and D_p is in units of the optical diameter of the sun. Fig.9 shows the dependence of the intensity of solar radiation on wavelength. The computed effective radio temperature turned out to be practically the same for all wavelengths (7.5×10^5 °K). There are 9 figures and 1 table.

ASSOCIATION: Fizicheskiy in-t im. P.N.Lebedeva Akademii nauk SSSR
(Physics Institute imeni P.N.Lebedev, AS USSR)

SUBMITTED: September 6, 1961

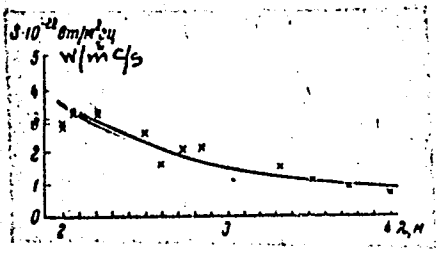
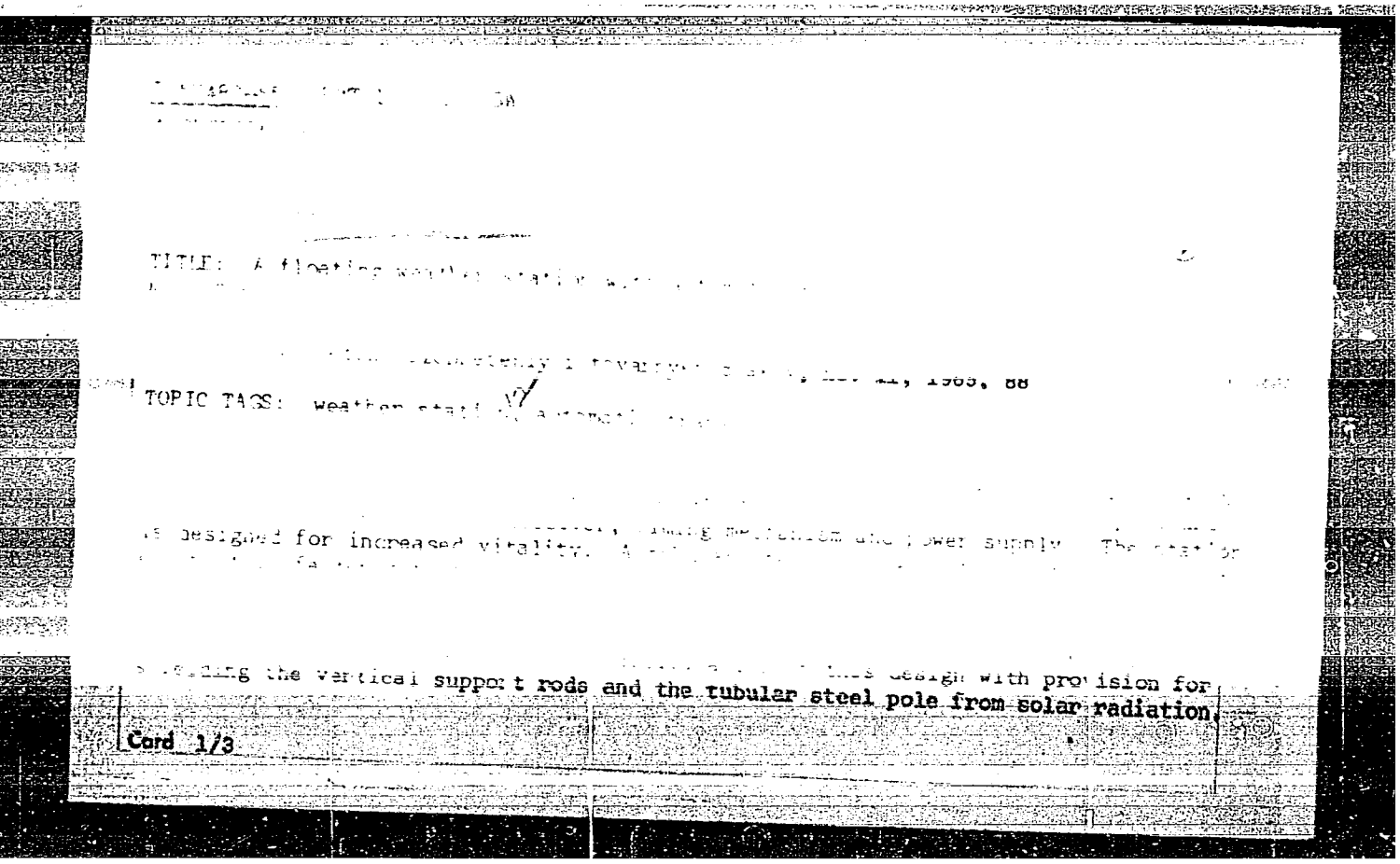


Fig.9

NAZINTSEV, Yu. L.; ALEKSEYEV, Yu.K.

Galvanic ice gauge. Metero i gidrol. no.4:45-47 Ap '61.
(MIRA 14:3)
(Ice—Measurement)



TITLE: A floating weather station

TOPIC TAGS: weather station

is designed for increased vitality. The station

protecting the vertical support rods and the tubular steel pole from solar radiation.

Card 1/3

L 57480-65

ACCESSION NR: AP5017855

An anti-radiation screen in the form of a flat canopy with an aerodynamic aperture in the central portion is suspended on springs from the support and from the pole. 3. A modification of this design in which the timing mechanism and electric batteries are placed in a hermetically sealed cylinder. The cylinder is suspended from the tubular steel pole and lowered beneath the ice during installation of the station to protect the timing mechanism and batteries from low air temperatures.

ASSOCIATION: none

SUBMITTED: 31Aug62 ENCL: 01 SUB CODE: ES

NO REF SOV: 000 OTHER: 000

Card 2/3

80515

3.5000 SOV/169-60-1-534

Translation from: Referativnyy zhurnal, Geofizika, 1960, Nr 1, p 67 (USSR)

AUTHOR: Alekseyev, Yu.K.

TITLE: An Experiment for Applying a Drifting Automatic Radiometeorologic Station in the Arctic

PERIODICAL: Sb. rabot po geofiz. i meteorol. metodam izmereniy i priboram. Leningrad, 1958, pp 102 - 103

ABSTRACT: The author describes briefly an automatic radiostation designed for the transmission of meteorologic data while drifting on ice in the Arctic. The average errors of the drifting radio-meteostations of the type developed in 1955 - 1956 amount to ± 1°C in temperature, ± 1 mb in pressure, and ± 1 m/sec in the wind velocity (the data on wind velocity are averaged by 4 - 5 min). The distance of recording the signals amounts to 1,500 km. The station is operated by a timing apparatus and by radio request-information message. The equipment of the station comprises: a transmitting device, an antenna, receiving-calling

Card 1/2

ACC NR: AT6022759 SOURCE CODE: UR/2649/65/000/224/0095/0102

AUTHOR: Kudryavtsev, V. V.; Remizov, O. A.; Alekseyev, Yu. L.

ORG: None

TITLE: An experimental study of the temperature field of a melt during single crystal growing

SOURCE: Moscow. Institut inzhenerov zheleznodorozhnogo transporta. Trudy no. 224, 1965, Voprosy slozhnogo teploobmena (Problems of complex heat exchange), 95-102

TOPIC TAGS: single crystal growing, temperature measurement, crystallization, temperature gradient

ABSTRACT: The authors study the effect of the temperature field of a melt on the distribution of alloying admixtures in a crystal during single crystal growing by the Czochralski method. The temperature field of the melt is varied by using heating units with various shapes, changing the location of the crucible with respect to the heating unit and varying the parameters of pulling. The following pulling parameters were used throughout this study: seed crystal rotation 20, 30 and 60 rpm; crucible rotation 0, 2, 5, 10 and 20 rpm; rate of seed crystal raising 1, 2 and 3 mm/min. The crystals were pulled in an argon atmosphere with a residual pressure of 0.4 gauge atmosphere. Chromel-alumel thermocouples were used for measuring the temperature field of the melt.

Card 1/2

ACC NR: AT6022759

Temperature measurements were taken in several of the horizontal cross sections of the melt with a depth interval of 3-5 mm and under the crystallization front. Standard heating units were used as well as a series of experimental ones developed at the MIIT Laboratory. The standard crucible charges were 2500 and 3500 g. The single crystals pulled usually were 200-240 mm long and 30 mm in diameter. An analysis of the temperature fields of the melt shows that the axial component of the temperature gradient in the melt region under the crystal decreases as the rate of pulling is increased. Three types of heating units were studied: radial heating, bottom-radial heating and bottom heating. The results show that the procedures worked out for measuring the temperature field in a melt may be used to measure the temperature in any part of the melt during crystal pulling. It is also shown that the shape of the heater, its location with respect to the crucible, and pulling parameters have a significant effect on ingot size. Controlling the rate of rotation of the seed crystal and crucible is an effective means for improving the quality of single crystals. The rate of seed crystal rotation has a significant effect on the distribution of alloying admixtures between the liquid and solid phases. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 004

Card 2/2

ALEKSEYEV, Yu.M. [Alekaieiev, IU.M.]; KORCHAGIN, V.L. [Korchahin, V.L.]

Characteristics of the mineralogical and chemical composition of clays useful for the production of keramzit. Geol. zhur. 25 no.2:80-83 '65. (MIRA 18:6)

1. Dnepropetrovskaya geologicheskaya ekspeditsiya Ukrainskogo nauchno-issledovatel'skogo gornorudnogo instituta.

ALEKSEYEV, Yuriy Mikhaylovich

[Industrial hygiene in forest management] Okhrana truda v lesnom khoziaistve. Moskva, Lesnaia promyshlennost', 1964. 80 p. (MIRA 19:1)

S/799/62/000/003/002/008

AUTHORS: Avaliani, Yu.Ye., Alekseyev, Yu.N., Glukhov, Yu.N., Dorokhova, N.A., Tanetov, G.I.

TITLE: The arithmetic equipment of a specialized machine.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no.3. 1962, 14-23.

TEXT: The paper describes an arithmetic equipment (AE) of the parallel type, which operates with 22-digit binary numbers with a fixed decimal point and which performs addition, subtraction, multiplication, division, extraction of the square root, matching, shifting, and transposition of numbers. An acceleration in the multiplicational operations is achieved by the accumulation of the partial products without transitional carry-overs. The system of the elements and the design principles of the AE are briefly examined. The system of elements comprises a static trigger, a potential-impulse gate, and logic diode circuits. All of the elements are made up of semiconductor devices. The network of the AE is presented in skeletal form, which comprises the various equipments that serve to perform the elementary operations in each register, and the equipments that receive numbers from other partial parts of the machine. The operational algorithms of addition, subtraction,

Card 1/3

and division, and the technical methods in the design of the logical circuits which help to realize the algorithms, are similar to those employed in some existing computers, for example, the M-2. Thus, for example, the adding equipment of the AE differs in its logic structure from that employed in the M-2 machine only by the content of cyclic carry-over circuit from the higher digit to the lower digit. While the operation of algebraic matching exhibits certain peculiarities dependent on the character of the problems to be solved, there is nothing interesting from the point of view of engineering. In this operation, the same circuits as those utilized in addition and subtraction are employed. The operation of shifting is also of no additional interest, since it employs the same shifting circuitry employed in multiplication and division. In the multiplication the partial products remain immobile, whereas the multiplicand is shifted to the right. It can be shown that to obtain, in such procedure, an accuracy of no less than a unit of the lowest digit for 22-digit initial figures, it is necessary to have 3 additional digits in the AE prior to rounding off. Extraction of the square root follows almost precisely the same method as that employed in high-school long-hand work, that is, with division of the number into pairs of digits, extraction of the square root of the highest digital pair, and all the other subsequent steps required by the 2-rectangles-cum-small-square method, until the remainder is either zero or smaller than the required accuracy residual. The duration of the extraction of the square root amounts to 112 cadences or 317 μ sec.

The arithmetic equipment of a specialized machine. S/179/62/000/003/002/008

If the number of which the square root is to be obtained has a minus sign, then all the digits go to zero, and the operation comes to a halt. The description of the AE elements comprises the static trigger, the logical diode scheme, and the potential impulse gate, schematic circuits for all of which are shown. A block diagram is shown for a basic (k-th) digit of the AE. The AE described contains approximately 1,000 semiconductor triodes and 4,000 semiconductor diodes, all of which operate in regimes in which current intensities, voltages, and powers do not exceed the rated values. A special cooling system ensures maintenance of all semiconductor devices at room temperature. The circuits employed ensure maintenance of a stable operation of the AE under power-supply-voltage fluctuations of ±10% from nominal values. The electrical power supply of the AE is provided by a 400-cps rotary generator through rectifiers assembled in a 6-phase circuit. The total power requirements of the AE is approximately 0.8 kw. The AE is currently in experimental operation. There are 5 figures and 3 references (2 Russian-language Soviet and the English-language A.A.Robinson, Multiplication in the Manchester University high-speed digital computer. Electronic Engrg., v.25, no.299, 1953).

Card 3/3

137-58-6-12213

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 148 (USSR)

AUTHOR: Alekseyev, Yu.N.

TITLE: Spring-back in Bending on Three Rolls (Pruzhineniye pri gibke na trekh valkakh)

PERIODICAL: Tr. Khar'kovsk. aviats. in-ta, 1957, Nr 17, pp 215-224

ABSTRACT: An examination is made of the fundamental postulates of the theory of spring-back applied to the bending (B) of a sheet, shape, or tube in machines based on the three-roll B principle, with the work in motion (M). Theoretical analysis shows that the solution of the problem of spring-back during M must differ markedly from the static solution advanced in a study by A.A. Il'yushin, i.e., when a beam (BE) is displaced, its deformation differs from the deformation experienced by a fixed BE owing to the different degrees of loading during the B process. Processes of B of fixed and moving BE beyond the elastic limits are examined. It is noted that when BE are subject to M in the process of B at points symmetrical relative to the supports, the BE are deformed variously. If plastic deformation occurs, the neutral axis becomes asymmetrical although the load be

Card 1/2

137-58-6-12213

Spring-back in Bending on Three Rolls

symmetrical. The asymmetrical curve of flexure introduces significant changes into the work of the BE and has a particularly marked effect upon the magnitude of the spring-back. Calculation of spring-back in a case of sheet M is adduced, and theoretical and experimental data are compared for the very complex case of the B of sheet on a machine with rolls of large diameter ranging over a wide range of values of B radii. It is shown that bending past the elastic limit while the product is in M differs significantly from the B of a motionless object and that calculation of spring-back without allowance for M results in large errors, while calculation with allowance for the M of the sheet yields good agreement with the experimental data.

G.F.

1. Metals--Processing 2. Metals--Properties 3. Rolling mills--Performance
4. Mathematics--Applications

Card 2/2

25(1) PHASE I BOOK EXPLOITATION SOV/1384

Alekseyev, Yuriy Nikolayevich

Voprosy plasticheskogo techeniya metallov (Problems of Plastic Flow of Metals) Khar'kov, Izd-vo Khar'kovskogo univ-ta, 1958. 187 p. 5,000 copies printed.

Resp. Ed.: Sharapin, Ye.F.; Ed.: Trem'yakova, A.N.

PURPOSE: The book is intended for engineers and scientific workers in the field of metal forming and may be used by students of vuzes studying this specialty.

COVERAGE: Some general problems of the plastic flow of metals based on modern concepts of the theory of plasticity and of mechanics of continuous media are examined. It is shown by a number of examples that the conclusions reached in the book are of a nature to apply generally to the theory of metal forming. As a characteristic of this book the solutions presented are based on the use of the general equations of mechanics of continuous media.

Card 1/6 2

S/147/59/000/04/020/020
E031/E413

AUTHOR: Zolotukhin, V.K.

TITLE: The Scientific-Technical Conference at Khar'kov Aviation Institute

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1959, Nr 4, pp 161-165 (USSR)

ABSTRACT: In May 1959, the 16th Conference of Professorial and

Card 8/11

Teaching Staff took place.
The "Technology of Aircraft Construction and Metal Working Section. "A New Model of the Plasticity of Metals" by Instructor, Candidate of Technical Sciences Yu.N.Alekseyev; "The Forging Extrusion of Large Components from Sheet Metal" by Aspirant A.P.Barsukov; "On the Problem of Constructing Second Order Curves in Aircraft Construction" by Senior Instructor M.A.Zaydenvarg; "The Electric Contact Welding of Thin Pieces of Metal" by Assistant N.M.Tarasov; "The Influence of Plastic Deformation on the Properties of Austenitic Stainless Steel at Various Temperatures" by Assistant N.V.Pisareva; "The Deformation of Non-Ferrous Metals and Alloys at Low Temperatures" by Assistant N.N.Lyulichava; "The Investigation of Phase Changes in Austenitic Steels Previously Deformed at Below Freezing Point Temperatures" by Candidate of Technical Sciences A.N.Chukhleb and Aspirant V.P.Martynov; "The Influence of the Temperature and Velocity of Deformation on the Phase Changes of Austenitic Steels" by Candidate of Technical Sciences A.N.Chukhleb and Fellow V.P.Martynov; "The Determination of Optimum Technical Grouping in the Design and Production of Aircraft" by Assistant

Card 9/11

Yu.A.Boborykin; "On the Use of Explosives in the Technology of Drop Forging" by Assistant K.I.Zaytsev; "Welding by Friction" by Assistant N.P.Ostrovskiy.
Structure of Aircraft Section.
"On the Problem of Protecting the Structure of Aircraft from Aerodynamic Heating" by Docent P.V.Dybskiy; "Passive Methods of Protection from Aerodynamic Heating" by Candidate of Technical Sciences F.G.Yasinskiy; "The Influence of the Parameters of a Thermally Isolated Packet on Heat Transfer Characteristics" by Assistant A.A.Kobylyanskiy; "Aircraft Structures Made from Fibreglass Sheets" by Docent, Candidate of Technical Sciences S.I.Kuz'min; "An Apparatus for Investigating Repeated Static Loading and High Temperatures" by Assistant L.A.Malashenko; "The Approximate Calculation of the Weight Taking into Account the Technical Features of the Aircraft Structure" by Candidate of Technical Sciences L.D.Areon; "The Determination of Stresses in a Shell as a Result of Riveting" by Assistant Yu.G.Fursa; "The Ultrasonic Altimeter (Sounding Device)"

Card 10/11 The Scientific-Technical Conference at Khar'kov Aviation Institute

and "The Radio-Control and Autopilot of an Experimental Model" by Engineer L.P.Teplov.

ALEKSEYEV, Yu. N., Dr. Tech. Sci. (diss) "Investigation of Processes of Plastic Deformation of Metals During Rapid Stamping," Moscow, 1961, 19 pp (Moscow Lathe-Instrument Insti.) 200 copies (KL Supp 12-61, 260).

VINOKUROV, Lev Pinkhusovich; KOLESNIKOV, L.A., kand. tekhn. nauk, retsenzent; CHERKASOV, A.P., kand. tekhn. nauk, retsenzent; ALEKSEYEV, Yu.N., kand. tekhn. nauk, retsenzent; KAN. S.N., prof., doktor tekhn. nauk, otv. red.; KURILOVA, T.M., red.; SMILYANSKAYA, T.M., tekhn. red.

[Structural mechanics of rod systems; theory of the deformation of rod systems] Stroitel'naia mekhanika sterzhnevykh sistem; teoriia deformirovaniia sterzhnevykh sistem. Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M.Gor'kogo. Pts. 2-3. 1961. 198 p. (MIRA 14:11)
(Beams and girders)

SHARAPIN, Yevgeniy Fedorovich [deceased]; ALEKSEYEV, Yu.N., otv. red.; SINYAVSKAYA, Ye.K., red. izd-va; ANDREYEV, S.P., tekhn.red.

[Elements in the theory of the press-working of metals] Elementy teorii obrabotki metallov davleniem. Khar'kov, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 207 p. (MIRA 14:12)
(Forging) (Rolling (Metalwork))

GARKUSHA, Ivan Fedoseyevich; ALEKSEYEV, Yu.V., red.; BARANOVA, L.G., tekhn. red.

[Soil science and the fundamentals of geology] Pochvovedenie s osnovami geologii. Moskva, Sel'khozizdat, 1963. 258 p. (MIRA 16:12)

(Soil science) (Geology)

ACCESSION NR: AP4014611 S/0122/64/000/001/0060/0065

AUTHOR: Alekseyev, Yu. N. (Doctor of technical sciences, Professor)

TITLE: Pressure forming of metals using impulse loading

SOURCE: Vestnik mashinostroyeniya, no. 1, 1964, 60-65

TOPIC TAGS: metal impulse forming, explosive metal forming, blast forming, forming energy, forming pressure

ABSTRACT: A short discussion of impulse forming of metals (with particular emphasis on explosive forming) is presented. After a qualitative discussion of impulse forming methods (stamping, etc.) the configurations used for explosive forming are discussed, and the major considerations in explosive forming calculations are presented. The coefficient of viscosity $\mu = \frac{1}{3}\frac{\sigma_i}{\varepsilon_i}$ (where ε_i = speed of deformation) for different kinds of materials is presented in analytical form. The work required for plastic deformation, $W = \mu(2\varepsilon_{11}^2 + 2\varepsilon_{22}^2 + \ldots \varepsilon_{31}^2)$, is given respectively for stamping of sheets, forming of a flat piece to a spherical shape,

Card 1/3

ACCESSION NR: AP4014611

and for embossing into a pattern as: $W=\frac{2}{\sqrt{3}}\sigma_T\frac{v_0 r_0}{r^2}$, $W=2\sigma_T v_0\frac{R^2}{r^3}$, $W=\frac{\sigma_T v_0}{h}$,

(where σ_T = flow stress, v_0 = speed of metal blank, r_0 = radius at clamping edge of die, r = radius of metal blank, R = radius of sphere, h = height of pattern). The above work functions have to be integrated over velocities and time to give a total work of plastic deformation A_0 which is used in $G=\frac{A_0}{500\eta}$ to find the required

weight of explosive G (where η = coefficient of useful work of the configuration, 1 - 30%). The pressures required to impulse-form a cylindrical and spherical part are given as:

$$p_a=\frac{2}{\sqrt{3}}\sigma_T\ln\left(1+\frac{h}{R}\right)+\frac{\rho v_0^2}{2}\left[1-\frac{1}{\left(1+\frac{h}{R}\right)^2}\right]-$$

$$-\rho R\ln\left(1+\frac{h}{R}\right)\frac{dv_0}{dt},\qquad p_a=2\sigma_T\ln\left(1+\frac{h}{R}\right)+\frac{\rho v_0^2}{2}\left[1-\frac{1}{\left(1+\frac{h}{R}\right)^4}\right]-$$

$$-\rho\frac{h}{1+\frac{h}{R}}\cdot\frac{dv_0}{dt},$$

Card 2/3

ACCESSION NR: AP4014611

(where h = thickness of metal blank). The pressure developed by an explosive is given as: $p(t) = k_1\left(\frac{G^{1/3}}{R_0}\right)^{\alpha} e^{-\frac{t}{\theta}}$ (where k, α, and θ are constants). It is suggested that for pressures above 2000 atm, pV^3 = const should be used to calculate the pressure, while at lower pressure pV^x = const should be used. Orig. art. has: 4 figures and 20 formulas.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 000

Card 3/3

ALEKSEYEV, Yu.N., inzh.; KORCHAGIN, V.L., inzh.

Additive expanding clay material. Stroi.mat. 10 no.12:23 D '64.
(MIRA 18:1)

VINOKUROV, Lev Pinkhusovich; ALEKSEYEV, Yu.N., prof.,doktor tekhn. nauk, otv. red.; DEREVYANCHENKO, R.M., red.

[Theory of elasticity and plasticity; theory of the deformation of a continuous solid and methods for calculating continuous systems based on this theory] Teoriia uprugosti i plastichnosti; teoriia deformirovaniia sploshnogo tverdogo tela i osnovannye na nei metody rascheta sploshnykh sistem. Khar'kov, Izd-vo Khar'kovskogo univ., 1965. 327 p. (MIRA 18.12)

USSR

ALFIMOV, N.N.; ALEKSEYEV, Yu.P.; AFANAS'YEV, B.G.; YAGOVOY, P.N.

Possibility of using universal radiometers of the "Fialka" and "Tiss" types for studying β-active preparations. Med.rad. no.3: 73-74 '62. (MIRA 15:3)

1. Iz kafedry voyenno-morskoy gigiyeny Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(RADIOMETER) (RADIOISOTOPES)

S/263/62/000/013/011/015
I007/I207

AUTHORS: Alfimov, N. N., Yagovoy, P. N., Alekseyev, Yu. P.

TITLE: The increase in β-ray-recording efficiency by use of end-window counters

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 32. Izmeritel'naya tekhnika, no. 13, 1962, 66–67, abstract 32.13.487. (Med. radiologiya, vol. 7, no. 2, 1962, 79–82)

TEXT: Description is given of a device containing two MCT-17 (MST-17) end-window counters. The β source to be measured is placed between the counters. Such geometry, approaching 4π, permits a considerable increase in β-ray recording efficiency. The apparatus consists of a housing in which the end-window counters are mounted. The separation between the windows is about 8 mm. Preparation of the radiation source is carried out in a special cassette and a pressing device. The time for measuring natural activity of a KCl preparation (weight 250 mg) was 22 min at a counting intensity of 65 pulses/min and a relative counting error of 5%, taking into account the background level of 28 pulses/min. There are 3 figures and 6 references.

[Abstracter's note: Complete translation.]

Card 1/1

SEMENENKO, A.A., inzh.; VASIL'YEV, M.Ya., inzh.; ALEKSEYEV, Yu.P., inzh.

Preparing a fireproof suspension without ethyl silicate solvents for investment casting. Mashinostroenie no.6:63-64 N-D '65. (MIRA 18:12)

PETROV, M.A.; NORMAN, E.A.; VOLODIN, A.P.; DENISOV, V.A.; KOCHKONOGOV, V.P.; BEGAM, L.G.; BARANOV, M.A.; TAVLINOV, V.K.; YENIKEYEV, G.Sh.; BARANOVA, A.I.; KUDRYAVTSEV, G.P.; MALYAVSKIY, B.K.; CHEGODAYEV, N.N.; SURIN, V.S.; GONIKBERG, I.V., retsenzent; ENGEL'KE, V A., retsenzent; KHRAPKOV, V.A., retsenzent; AL'PERT, G.A., retsenzent; ALEKSEYEV, B.N., retsenzent; SKLYAROV, A.A., retsenzent ALEKSEYEV, Ye.P., retsenzent

[Railroad surveying; reference and methodological handbook] Izyskaniia zheleznykh dorog; spravochnoe i metodicheskoe rukovodstvo. Moskva, Transport, 1964. 495 p. (MIRA 18:1)

1. Babushkin. Vsesoyuznyy nauchno-issledovatel'skiy institut transportnogo stroitel'stva. 2. Leningradskiy gosudarstvennyy proyektno-izyskatel'skiy institut Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR (for Gonikberg, Engel'ke, Khrapkov). 3. Sibirskiy gosudarstvennyy proyektno-izyskatel'skiy institut Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR (for Alekseyev, YeP.). 4. Moskovskiy gosudarstvennyy proyektno-izyskatel'skiy institut Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR (for Al'pert).

BOTUK, B.O.; DMITRIYEVSKIY, N.G.; ALEKSEYEV, Yu.S.

Effect of the lateral current compression at the jump entrance on the coefficient of velocity of the hydraulic jump. Izv.vys.ucheb.zav.; stroi. i arkhit. no.5:119-125 '58. (MIRA 12:1)
(Hydraulic jump)

BOTUK, B.O. (Odessa); DMITRIYEVSKIY, N.G. (Odessa); SAVCHENKO, G.D. (Odessa); ALEKSEYEV, Yu.S. (Odessa)

Efficient type of distributing structures in sewage purification works. Vod.i san.tekh. no.4:22-24 Ap '60. (MIRA 13:6)

(Sewage--Purification)